

2016

Evolving Role of Pharmacies in Medication Adherence

Anushree Priyadarshini

Follow this and additional works at: <https://arrow.tudublin.ie/busaccoth>



Part of the [Accounting Commons](#)

This Presentation is brought to you for free and open access by the School of Accounting and Finance at ARROW@TU Dublin. It has been accepted for inclusion in Other resources by an authorized administrator of ARROW@TU Dublin. For more information, please contact yvonne.desmond@tudublin.ie, arrow.admin@tudublin.ie, brian.widdis@tudublin.ie.



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 3.0 License](#)

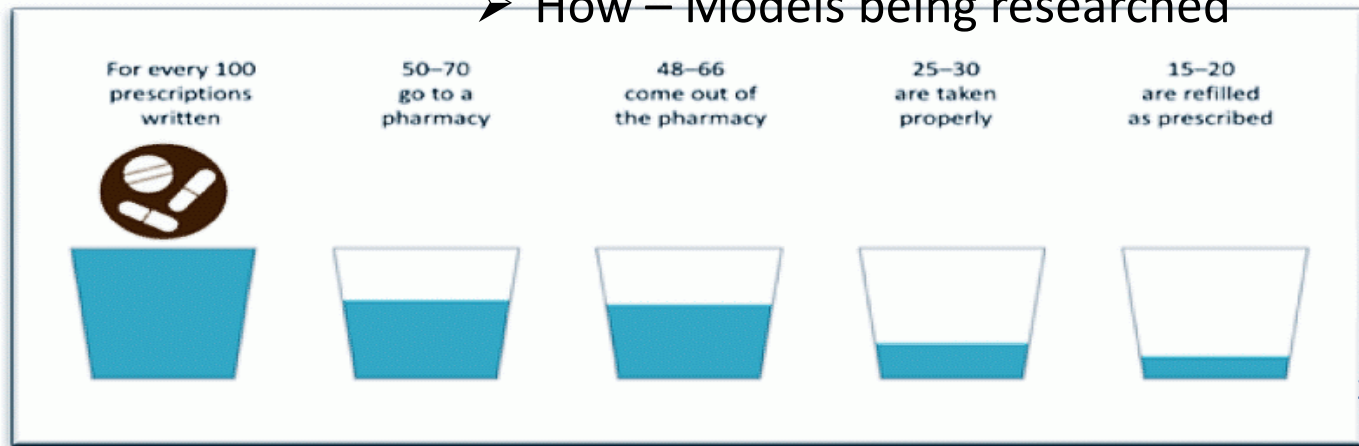
Evolving Role of Pharmacies in Medication Adherence

Dr. Anushree Priyadarshini

Outline

Medication Adherence:

- The problem
- The Impact
- The Solution
- Role of Community Pharmacies:
 - Why
 - How – Models being researched



ARCH White Paper



ARCH – Applied Research for Connected Health
an Enterprise Ireland and IDA Ireland Technology Centre

Medication Adherence with Smart Phones: Pharmacists Focused Apps

Document Type: White paper

ARCH Theme: Change

ARCH Theme Leader: Dr. Gerardine Doyle

Authors: Dr. Anushree Priyadarshini and Dr. Maria Quinlan

Document Version: Final

Date of Publication: 17th May 2016

Copyright © to the authors. All contents availed from this report should be referenced correctly. ARCH is a technology research centre based in UCD and also has researchers in University of Limerick.

- Medication adherence with mobile devices
- Currently available apps for adherence
- Patients perceptions of pharmacy driven apps
- Framework for adherence management: role of pharmacists
- Implications for patients and pharmacies

http://www.arch.ie/wp-content/uploads/2016/05/Medication-Adherence-with-Smart-Phones_ARCH-Whitepaper1.pdf

Medication Non Adherence: The Problem

- It is estimated that 20% to 30% of patients do not adhere to medication regimens that are curative or relieve symptoms
- 30% to 40% fail to follow regimens designed to prevent health problems
- When long-term medication is prescribed, 50% of patients fail to adhere to the prescribed regimen

Medication Non Adherence: The Impact

Nearly 200,000 deaths per year in Europe is linked to medication non adherence

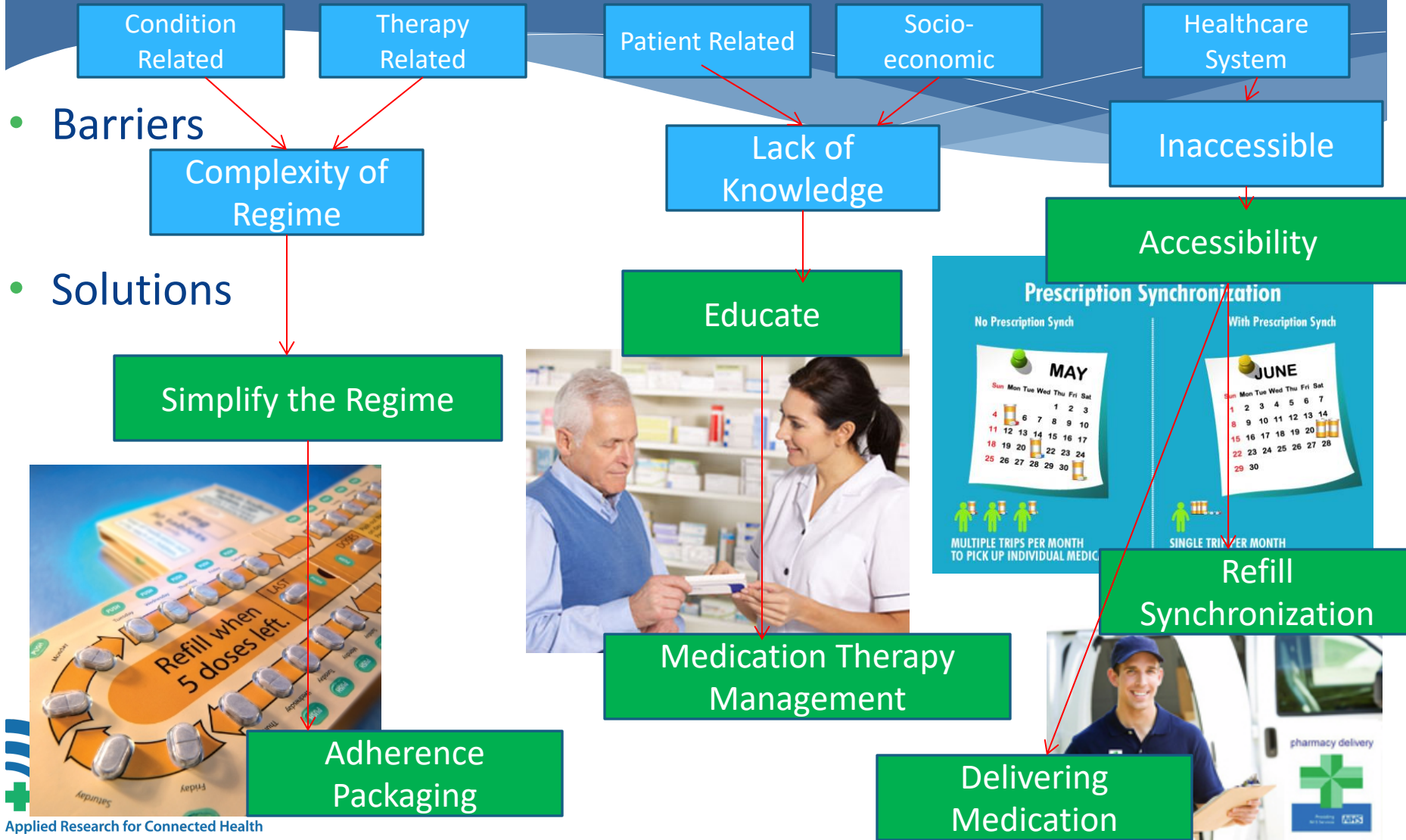
Medication Non-adherence = €125 Billion

↑ costs to health care system

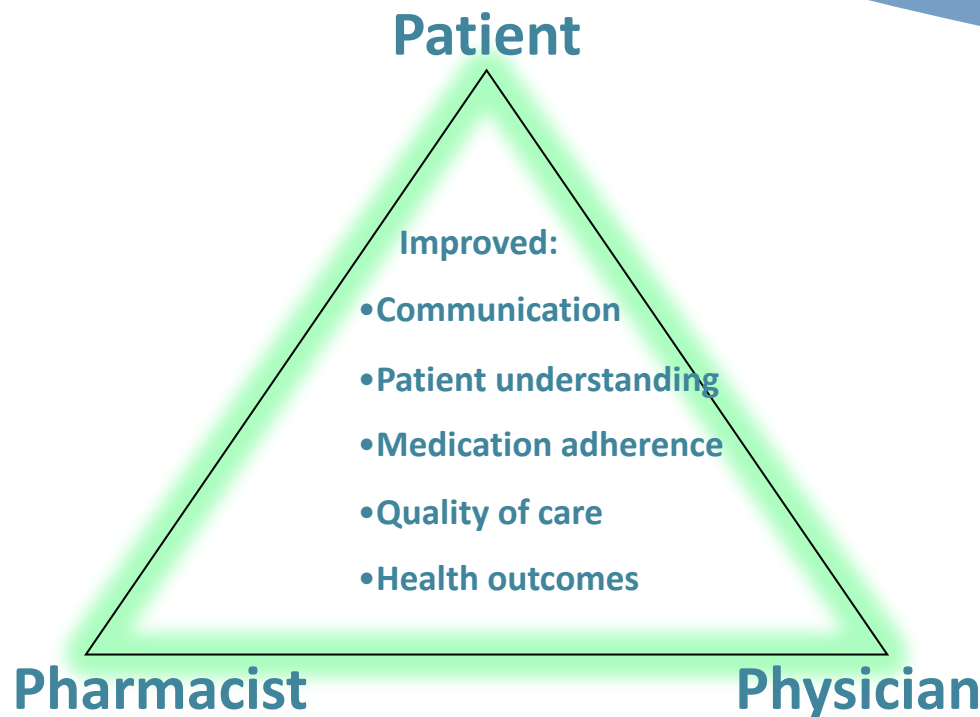
↑ costs to employers and payers

↑ premiums and co-pays to patients and
↓ health outcomes

It's Time to Bring Solutions



Role of Community Pharmacies: Why & How



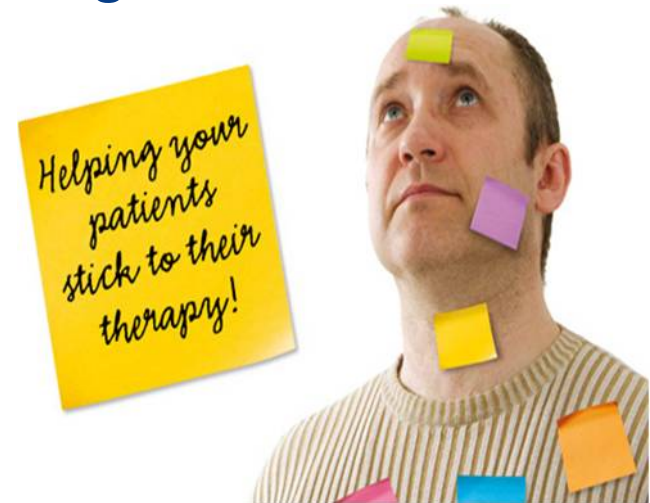
- Uniquely positioned to complete the triad of care as they communicate with patients and collaborate with physicians and other health care professionals
- Trusted medication expert
- Most accessible provider in community
- Last health care professional seen by patient before medications are taken

Role of Community Pharmacies: Why & How

- Pharmacists can affect the delivery of primary care through various programs and services, including comprehensive medication reviews; identifying, preventing and resolving medication-related problems; optimizing complex regimens; designing adherence programs; and recommending cost-effective therapies
- These can be categorised as:
 - Patient –dependent interventions
 - Patient –independent interventions

Patient – dependent interventions

- Non-automated phone calls
- Medication refill synchronization,
- In-person meetings using techniques such as pharmacist provided medication therapy management services
- Adherence packaging
- Motivational interviewing



Patient –independent interventions

- Mail/Fax or hand-distributed information
- Electronic systems, such as electronic pill boxes and caps with programmable reminders and beepers
- Automated phone calls with interactive components
- Computer-generated individualized interventions
- Cellular mobile devices and applications
- Automatic home monitoring systems (e.g., home blood pressure monitors)



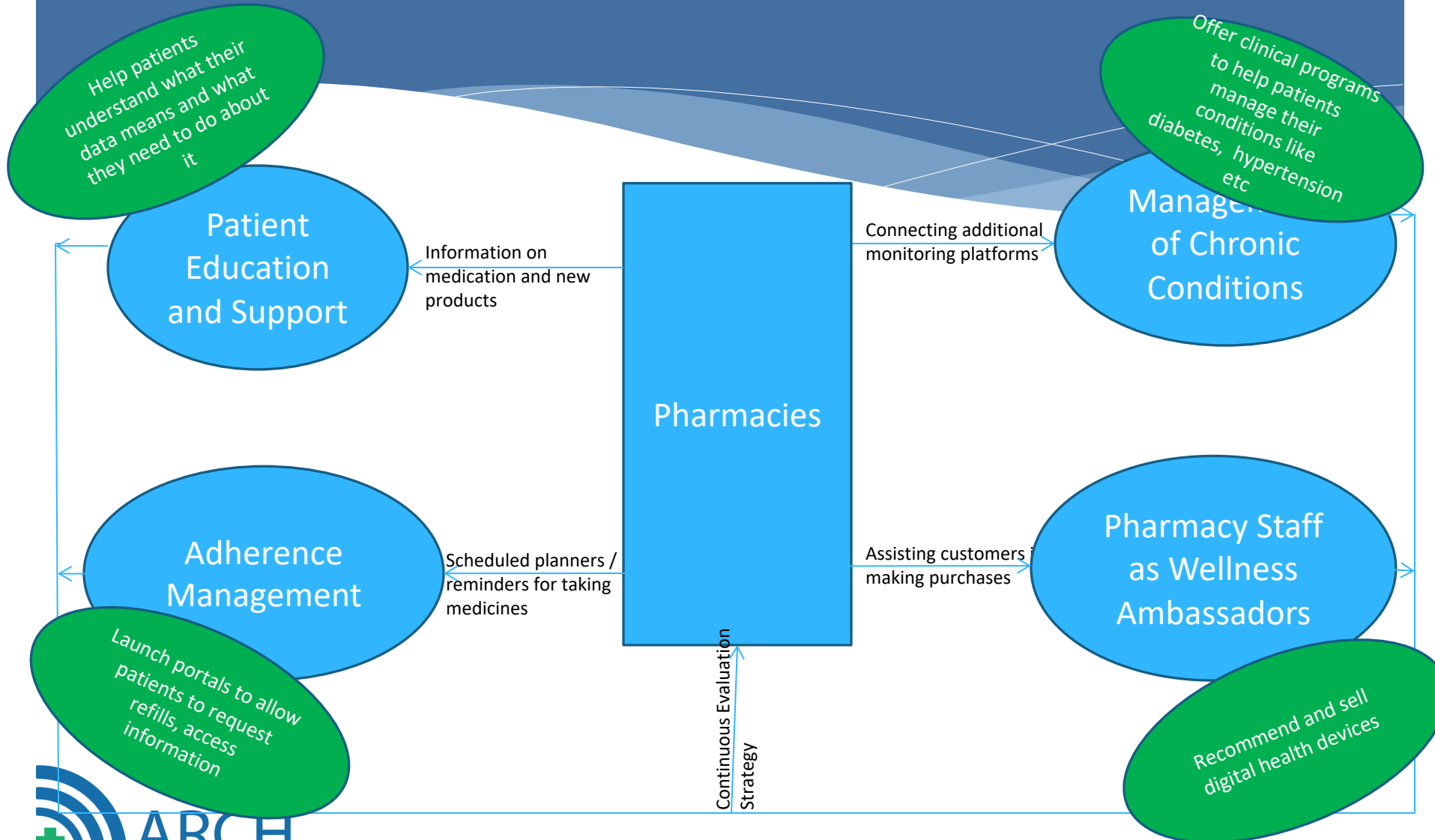
DIGITAL HEALTH
COACH

DIGITAL HEALTH COACH

- There are apps and devices and data, but no “customer support”
- Community pharmacist to fulfil that role, to be an accessible and knowledgeable - Digital Health Coach



DIGITAL HEALTH COACH



Adherence Pharmacy

- A pharmacy practice model that uses a combination of person-dependent and person-independent interventions offers a means of integrating and implementing adherence-enhancing solutions
- The Adherence Pharmacy focuses on improving medication adherence by having the pharmacist work with the patient, prescriber, caregiver, and other members of the patient's healthcare team, with the goal of facilitating and improving medication adherence
- It employs a combination of MTM, medication synchronization, and adherence packaging to improve patient outcomes using an appointment based model

Adherence Pharmacy

Setting

- The Adherence Pharmacy is located in a community setting. Although, the concept can be applied in any setting

Layout

- The counselling area contains two private counselling rooms
- The processing area includes the adherence packaging equipment, medication stock and pharmacist workspace

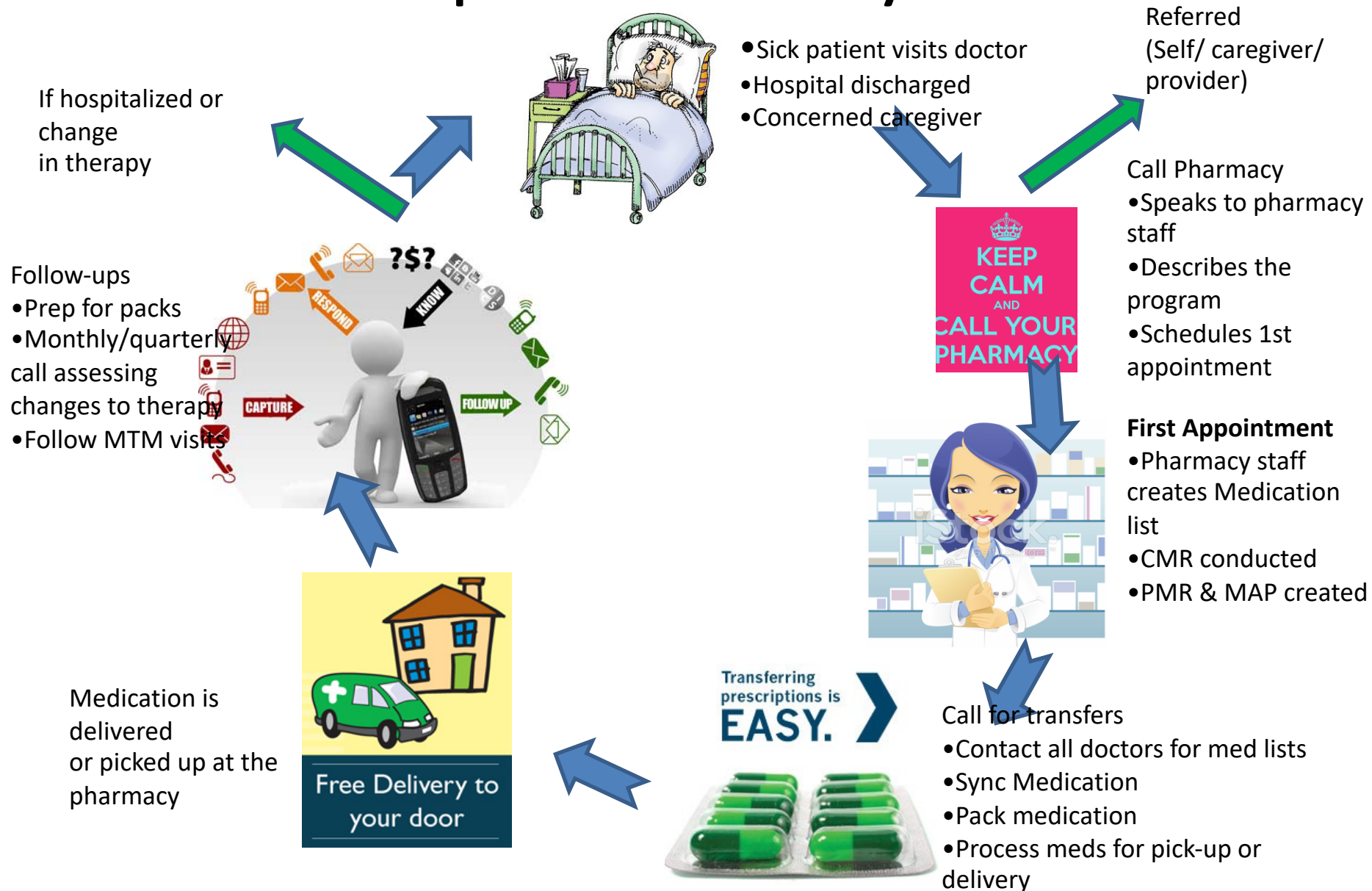
Pharmacy Staff

- Started with 2 pharmacists and 2 technicians

Services Provided

- Medication Therapy Management Using the Appointment Based Method
- Medication Refill Synchronization
- Adherence Packaging
- Monthly/Quarterly delivery of the adherence packages

Operational Cycle



Advanced Practice Designations

- Efforts are underway by the Joint Commission of Pharmacy Practitioners, USA to expand Pharmacists' scope of practice by creating advanced practice pharmacy designation
- Allowing pharmacists to provide direct patient care, including primary care, initiating and modifying drug therapies or performing lab tests when the collaborating health provider agrees that those services are necessary and that the pharmacist is capable of safely providing them

Win-Win

- Community pharmacists are best positioned to positively influence patient medication adherence that will:
 - Improve care with high-touch, face-to-face counseling
 - Keep patients healthier in their communities
 - Lower overall health care costs by reviewing medications for the most cost-effective therapies, and reducing or preventing hospitalizations in the long run



Thank you